ELSEVIER

Journal of Materials Processing Technology 159 (2005) 445–446

Journal of Materials Processing Technology

www.elsevier.com/locate/jmatprotec

Author Index of Volume 159

Abdul Rajak, S., 409
Alcala, F.C., 164
An, G., 265
Andersson, A., 426
Andrade, R.M., 125
Araujo-Osorio, J.E., 164
Arentoft, M., 62
Arrieux, R., 152
Aydemir, A., 303

Baltateanu, D., 311
Baştürk, G., 99
Battaglia, J.L., 119
Beer, P., 224
Bhattacharyya, B., 286
Bontcheva, N., 9
Boutinguiza, M., 83
Braghini Jr., A., 240
Brekelmans, W.A.M., 303

Caiazzo, F., 279
Cava, S., 125
Chandra, S., 295
Cemal Cakir, M., 191
Chen, M.-D., 1
Chen, W.K., 229
Cheng, S.X., 295
Chun, B.S., 389
Corrêa, D.C., 435
Coudert, T., 152
Curcio, F., 279
Curodeau, A., 17

Daurelio, G., 279
de Vree, J.H.P., 303
Diniz, A.E., 240
Dorantes-Rosales, H.J., 164

Ferician, F., 311
Fowler, G., 356
Frias-Flores, J., 164
Fuh, K.-H., 1
Fukuzawa, Y., 199
Furet, B., 33

Garza, L.G., 169
Gawroński, Z., 249
Geers, M.G.D., 303
Gethin, D.T., 338
Gillot, F., 33
Gindl, M., 224
Gokhale, A.A., 369
Gomes, C., 91
Gomes, D.M., 240

Gronostajski, Z., 377

Hameedullah, M., 145
Han, H., 401
Han, Z.-W., 383
Hassan, M.A., 418
He, X.-B., 135
Hinds, B.K., 181
Hsu, R.-Q., 1
Huang, H., 229
Huang, Y.-M., 257

Iankov, R., 9
Isik, Y., 191
Ismail, N., 145

Jansson, T., 426
Jayakumar, T., 48
Jeong, M.-C., 159
Jiang, C.-P., 257
Jiawen, X., 272

Kaitkay, P., 206
Kamişli, F., 40
Kang, C.G., 321, 330
Kang, H.S., 159
Kang, S.B., 314
Katayama, I., 199
Kelly, D., 181
Kim, H.H., 113
Kim, I.J., 113
Kim, I.S., 113
Ko, Y.-D., 159
Kotera, H., 397
Kruszyński, B., 249
Kula, P., 249

Lassen, S., 62
Lee, J.H., 389
Lee, S.Y., 159
Lei, S., 206
Lessard, J., 17
Lewis, R.W., 338
Li, T., 295
Liang, G.Y., 265
Lindegren, M., 62
Liu, C., 383
Longo, E., 125
López Hirata, V.M., 164
Lovell, M., 91
Lu, W.-P., 383
Lusquiños, F., 83

MacAlpine, J.M.K., 265

Mahrenholtz, O., 9
Makiyama, T., 139
Maleque, M.A., 145
Mannan, S.L., 48
Mao, J., 314
Marceau, L.F., 17
Márquez, J.J., 69
Martins, P.A.F., 214
McCartney, J., 181
Memola Copece Minutolo, F., 279
Mitra, S., 286
Mognol, P., 33
Moisan, A., 119
Mukhopadhyay, C.K., 48
Murata, M., 139
Murayama, M., 199
Myoung, J.-M., 159

Nagasawa, S., 199
Naizhang, Y., 272
Nilsson, L., 426

Onipede, O., 91

Palma, E.S., 435
Park, C.E., 113
Park, J.O., 314
Pashby, I.R., 356
Paskocimas, C.A., 125
Paulescu, M., 311
Pérez, J.M., 69
Pérez-Amor, M., 83
Postek, E.W., 338
Pou, J., 83
Prakash, S., 347
Puri, D., 347

Quintero, F., 83

Raj, B., 48
Rajurkar, K.P., 272
Rangel-Ortiz, T., 164
Ransing, R.S., 338
Rech, J., 119
Reddy, N.V., 409
Ren, L.-Q., 383
Richard, M., 17
RobertoLeite, E., 125
Rodrigues, J.M.C., 214
Ríos, J., 69
Rossi, C.C., 125

Sales, W.F., 435
Santos, S.C., 435

Elsevier B.V.
doi:10.1016/S0924-0136(04)01300-7

Sapuan, S.M., 145
Saucedo-Muñoz, M.L., 164
Sarkar, S., 286
Schlett, Z., 311
Seo, P.K., 321, 330
Shangwu, X., 214
Shima, S., 397
Shipway, P.H., 356
Sidhu, B.S., 347
Sillekens, W.H., 303
Silva, S.N., 125
Singh, V., 369
Sinn, G., 224
Soledade, L.E.B., 125
Son, J.S., 113
Soto, R., 83
Steen, W.M., 83
Suddin, M.N., 145
Suenaga, R., 418

Tabourot, L., 152
Takakura, N., 418
Tong, J., 383
Toussaint, F., 152
Tschegg, S., 224
Turan, C., 40

Vacher, P., 152
Van Tyne, C.J., 169
Varela, J.A., 125
Venugopal, S., 48
Vitanov, V.I., 27
Vizán, A., 69
Voutchkov, I.I., 27

Wanheim, T., 62
Watkins, K., 83
Werkhoven, R.J., 303
Wong, T.T., 265

Xia, Q., 397

Yamaguchi, K., 418
Yamaguchi, T., 199
Yang, H., 135
Yangxin, T., 272
Yapıcı, H., 99
Yasuhuku, D., 397
Yin, L., 229
Youn, S.W., 321, 330
Yun, I., 159

ELSEVIER

Journal of Materials Processing Technology 159 (2005) 447–452

Journal of Materials Processing Technology

www.elsevier.com/locate/jmatprotec

Subject Index of Volume 159

AA8090
Effect of Zr content and mechanical working on the structure and tensile properties of AA8090 alloy plates, 369
Acoustic emission technique
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48
Adaptive simulation approach
An adaptive simulation approach designed for tube hydroforming processes, 303
Additive model
Parametric analysis and optimization of wire electrical discharge machining of γ-titanium aluminide alloy, 286
Ageing time
Data base construction on mechanical properties of thixoforged aluminum parts and their microstructure evaluation, 330
Alligatoring
Prediction of internal defects in plane strain rolling, 409
Al–Li–Hf alloys
Microstructure and tensile properties of a continuous-cast Al–Li–Hf alloy, 164
Aluminium–lithium
Effect of Zr content and mechanical working on the structure and tensile properties of AA8090 alloy plates, 369
Anisotropic
Modelling of anisotropic performance fabrics, 181
Anisotropy
Investigation of springback in high strength anisotropic steels, 91
Determination of mean flow stress and friction coefficient by the modified two-specimen method in cold rolling, 401
Applied pressure
Data base construction on mechanical properties of thixoforged aluminum parts and their microstructure evaluation, 330
Arbitrary shaped dies
Finite element analysis of thixoforming process with arbitrary shape die, 321
Artificial neural networks
Neural network based modeling of PL intensity in PLD-grown ZnO thin films, 159
Automatic mesh generation
Finite element analysis of thixoforming process with arbitrary shape die, 321
Automation
Process modeling for robotic polishing, 69
Automotive bumper system
A note on the conceptual design of polymeric composite automotive bumper system, 145
AWJ
A technical note on grit embedment following abrasive water-jet milling of a titanium alloy, 356

Bead geometry
An investigation into an intelligent system for predicting bead geometry in GMA welding process, 113
Bimetallic bearings
Machinability of bimetallic bearings using cemented carbide tools: evaluation of the wear mechanisms, 435
Blank design
Investigation on the variation of deep drawability of STS304 using FEM simulations, 389
Blanking
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48
Boring
Machinability of bimetallic bearings using cemented carbide tools: evaluation of the wear mechanisms, 435
Boundary element method
Simulation of plane strain rolling through a combined element free Galerkin–boundary element approach, 214
Busbars
The electrical conductivity of laser-remelted and plasma-sprayed Ni and Cr coatings, 265

Carburising
Synergistic effects of thermo-chemical treatment and super abrasive grinding in gears' manufacturing, 249
Cast alloys
Microstructure and tensile properties of a continuous-cast Al–Li–Hf alloy, 164
Casting
Effect of Zr content and mechanical working on the structure and tensile properties of AA8090 alloy plates, 369
CBN grinding
Synergistic effects of thermo-chemical treatment and super abrasive grinding in gears' manufacturing, 249
CBN tools
Turning of hardened steel with interrupted and semi-interrupted cutting, 240
Cemented carbide
Machinability of bimetallic bearings using cemented carbide tools: evaluation of the wear mechanisms, 435
Central burst
Prediction of internal defects in plane strain rolling, 409
Channel section
Spline finite strip analysis of forming parameters in roll forming a channel section, 383
Characterisations
Mechanical and metallurgical properties of plasma sprayed and laser remelted Ni–20Cr and Stellite-6 coatings, 347
Chip formation
Experimental study of rock cutting under external hydrostatic pressure, 206
Chipless machining
A technical note on grit embedment following abrasive water-jet milling of a titanium alloy, 356
CNC extrusion machine
A technical note on the development of prototype CNC variable vertical section extrusion machine, 139

Elsevier B.V.
doi:10.1016/S0924-0136(04)01301-9

CO_2 laser
Drilling of slate tiles by CO_2 laser, 83
CO_2 laser cutting process
Laser cutting of different polymeric plastics (PE, PP and PC) by a CO_2 laser beam, 279
Coatings
Thermal influence of cutting tool coatings, 119
Mechanical and metallurgical properties of plasma sprayed and laser remelted Ni–20Cr and Stellite-6 coatings, 347
Cold forming
Reversed straining in axisymmetric compression test, 62
Cold rolling
Determination of mean flow stress and friction coefficient by the modified two-specimen method in cold rolling, 401
Compression molding
New EDM polishing and texturing process with conductive polymer electrodes, 17
Conceptual design
A note on the conceptual design of polymeric composite automotive bumper system, 145
Conductivity
The electrical conductivity of laser-remelted and plasma-sprayed Ni and Cr coatings, 265
Continuous caster
Microstructure and tensile properties of a continuous-cast Al–Li–Hf alloy, 164
Contour evolution
The modelling of NC-electrochemical contour evolution machining using a rotary tool-cathode, 272
Coupled problems
Influence of initial stresses on the cast behaviour during squeeze forming processes, 338
Cracking
Surface hot-shortness of 1045 forging steel with residual copper, 169
Crushing
Orthotropic effect and strain dependency of paperboard on load characteristic of center bevel cutter indented on paperboard, 199
Crystallographic analysis
On the possibility of obtaining silicon carbide using the glow-discharge electron gun, 311
Cutting
Thermal influence of cutting tool coatings, 119
Cutting edge
Orthotropic effect and strain dependency of paperboard on load characteristic of center bevel cutter indented on paperboard, 199
Cutting force
Experimental study of rock cutting under external hydrostatic pressure, 206

Deep drawing
Numerical determination of strain localisation during finite element simulation of deep-drawing operations, 152
Investigation on the variation of deep drawability of STS304 using FEM simulations, 389
A study of the one-path deep drawing spinning of cups, 397
A novel process on friction aided deep drawing using tapered blank holder divided into four segments, 418
Designing and optimizing thixoformed products
Finite element analysis of thixoforming process with arbitrary shape die, 321
Diamond wheel
Loose abrasive truing and dressing of resin bond diamond cup wheels for grinding fibre optic connectors, 229
Diffusion
Neural network based modeling of PL intensity in PLD-grown ZnO thin films, 159
Digital image correlation
Numerical determination of strain localisation during finite element simulation of deep-drawing operations, 152
Dimensional accuracy
Dimensional accuracy studies of copper shells used for electro-discharge machining electrodes made with rapid prototyping and the electroforming process, 33
Draw bead
Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, 426
Draw-in
Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, 426
Drawing
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48
Droplet generator
Producing molten metal droplets with a pneumatic droplet-on-demand generator, 295
Drop-on-demand
Producing molten metal droplets with a pneumatic droplet-on-demand generator, 295

EDM
New EDM polishing and texturing process with conductive polymer electrodes, 17
Electrochemical machining (ECM)
The modelling of NC-electrochemical contour evolution machining using a rotary tool-cathode, 272
Electrodes
Dimensional accuracy studies of copper shells used for electro-discharge machining electrodes made with rapid prototyping and the electroforming process, 33
Electro-discharge machining
Dimensional accuracy studies of copper shells used for electro-discharge machining electrodes made with rapid prototyping and the electroforming process, 33
Electroforming
Dimensional accuracy studies of copper shells used for electro-discharge machining electrodes made with rapid prototyping and the electroforming process, 33
Element free Galerkin method
Simulation of plane strain rolling through a combined element free Galerkin–boundary element approach, 214
Energy
Work of fracture and of chips formation during linear cutting of particle-board, 224
Equal-channel angular pressing
Grain refinement, thermal stability and tensile properties of 2024 aluminum alloy after equal-channel angular pressing, 314
Erosion
A technical note on grit embedment following abrasive water-jet milling of a titanium alloy, 356
Experimental analysis
A technical note on the development of prototype CNC variable vertical section extrusion machine, 139
Extrusion
A technical note on the development of prototype CNC variable vertical section extrusion machine, 139

Fabric modelling
Modelling of anisotropic performance fabrics, 181
FEA
Prediction of internal defects in plane strain rolling, 409
FEM
Influence of surface roughness on friction during metal forming processes, 9

Investigation on the variation of deep drawability of STS304 using FEM simulations, 389
Finishing operation
New EDM polishing and texturing process with conductive polymer electrodes, 17
Finite element analysis
Investigation of springback in high strength anisotropic steels, 91
Numerical determination of strain localisation during finite element simulation of deep-drawing operations, 152
Finite elements
Influence of initial stresses on the cast behaviour during squeeze forming processes, 338
Finite strip method
Spline finite strip analysis of forming parameters in roll forming a channel section, 383
Force
Work of fracture and of chips formation during linear cutting of particle-board, 224
Forging
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48
Surface hot-shortness of 1045 forging steel with residual copper, 169
Forming parameters
Spline finite strip analysis of forming parameters in roll forming a channel section, 383
Forward slip
Determination of mean flow stress and friction coefficient by the modified two-specimen method in cold rolling, 401
Friction aided deep drawing
A novel process on friction aided deep drawing using tapered blank holder divided into four segments, 418
Friction coefficient
Determination of mean flow stress and friction coefficient by the modified two-specimen method in cold rolling, 401

Glow-discharge electron gun
On the possibility of obtaining silicon carbide using the glow-discharge electron gun, 311
GMA welding
An investigation into an intelligent system for predicting bead geometry in GMA welding process, 113
Grain refinement
Grain refinement, thermal stability and tensile properties of 2024 aluminum alloy after equal-channel angular pressing, 314
Grinding
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48

Hardened steel turning
Turning of hardened steel with interrupted and semi-interrupted cutting, 240
High solid fraction
Data base construction on mechanical properties of thixoforged aluminum parts and their microstructure evaluation, 330
Hi-Nicalon/SiC composites
Preparation of SiC fiber-reinforced SiC composites, 135
Hot shortness
Surface hot-shortness of 1045 forging steel with residual copper, 169
Hydrostatic pressure
Experimental study of rock cutting under external hydrostatic pressure, 206

Incremental forming
A study of the one-path deep drawing spinning of cups, 397
Industrial net shape forming application
Finite element analysis of thixoforming process with arbitrary shape die, 321
Initial stresses
Influence of initial stresses on the cast behaviour during squeeze forming processes, 338
Intelligent system
An investigation into an intelligent system for predicting bead geometry in GMA welding process, 113
Interrupted cutting
Turning of hardened steel with interrupted and semi-interrupted cutting, 240

Kerf widths
Laser cutting of different polymeric plastics (PE, PP and PC) by a CO_2 laser beam, 279

Laser drilling
Drilling of slate tiles by CO_2 laser, 83
Laser remelting
The electrical conductivity of laser-remelted and plasma-sprayed Ni and Cr coatings, 265
Mechanical and metallurgical properties of plasma sprayed and laser remelted Ni–20Cr and Stellite-6 coatings, 347
Localisation
Numerical determination of strain localisation during finite element simulation of deep-drawing operations, 152
Loose abrasive lapping
Loose abrasive truing and dressing of resin bond diamond cup wheels for grinding fibre optic connectors, 229

Machining
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48
Material testing
Reversed straining in axisymmetric compression test, 62
Materials engineering
Process parameters selection for friction surfacing applications using intelligent decision support, 27
Mean flow stress
Determination of mean flow stress and friction coefficient by the modified two-specimen method in cold rolling, 401
Mechanical properties
Preparation of SiC fiber-reinforced SiC composites, 135
Mechanical property
Data base construction on mechanical properties of thixoforged aluminum parts and their microstructure evaluation, 330
Metal forming
Influence of surface roughness on friction during metal forming processes, 9
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48
Investigation of springback in high strength anisotropic steels, 91
A technical note on the development of prototype CNC variable vertical section extrusion machine, 139
Metal spheres
Producing molten metal droplets with a pneumatic droplet-on-demand generator, 295
Metals and alloys
Process parameters selection for friction surfacing applications using intelligent decision support, 27
Micro-crack generation
Prediction of internal defects in plane strain rolling, 409
Microstructural changes
Deformation processing map for control of CuSi3.9 silicon bronze microstructure, 377

Microstructure
Preparation of SiC fiber-reinforced SiC composites, 135
Microstructure and tensile properties of a continuous-cast Al–Li–Hf alloy, 164
Effect of Zr content and mechanical working on the structure and tensile properties of AA8090 alloy plates, 369
Microtome
Work of fracture and of chips formation during linear cutting of particle-board, 224
Modeling
Neural network based modeling of PL intensity in PLD-grown ZnO thin films, 159
The modelling of NC-electrochemical contour evolution machining using a rotary tool-cathode, 272
Moving heat source
Numerical solutions of transient temperature and thermally induced stress distributions in a solid disk heated with radially periodic expanding and contracting ring heat flux, 99
MTSM
Determination of mean flow stress and friction coefficient by the modified two-specimen method in cold rolling, 401
Multiple regression
An investigation into an intelligent system for predicting bead geometry in GMA welding process, 113

Neural network
An investigation into an intelligent system for predicting bead geometry in GMA welding process, 113
Ni–20Cr
Mechanical and metallurgical properties of plasma sprayed and laser remelted Ni–20Cr and Stellite-6 coatings, 347
Non-local friction
Influence of surface roughness on friction during metal forming processes, 9
Numerical control (NC)
The modelling of NC-electrochemical contour evolution machining using a rotary tool-cathode, 272

Optimization
Parametric analysis and optimization of wire electrical discharge machining of γ-titanium aluminide alloy, 286
Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, 426
Orthotropy
Orthotropic effect and strain dependency of paperboard on load characteristic of center bevel cutter indented on paperboard, 199
Over-roll thickness
Effects of over-roll thickness on cone surface roughness in shear spinning, 1

Particle-board
Work of fracture and of chips formation during linear cutting of particle-board, 224
Plane strain rolling
Simulation of plane strain rolling through a combined element free Galerkin–boundary element approach, 214
Prediction of internal defects in plane strain rolling, 409
Plasma spray
Mechanical and metallurgical properties of plasma sprayed and laser remelted Ni–20Cr and Stellite-6 coatings, 347
Plasma spraying
The electrical conductivity of laser-remelted and plasma-sprayed Ni and Cr coatings, 265
Polishing
Process modeling for robotic polishing, 69
Polymer composite
New EDM polishing and texturing process with conductive polymer electrodes, 17
A note on the conceptual design of polymeric composite automotive bumper system, 145
Polyvinyl chloride panels
A study on usability of magnesium oxide with titanium dioxide in PVC door and window profiles, 40
Powders
Producing molten metal droplets with a pneumatic droplet-on-demand generator, 295
Power dissipation
Deformation processing map for control of CuSi3.9 silicon bronze microstructure, 377
Preparation processes
Preparation of SiC fiber-reinforced SiC composites, 135
Processing
Effect of Zr content and mechanical working on the structure and tensile properties of AA8090 alloy plates, 369
Process optimization
An adaptive simulation approach designed for tube hydroforming processes, 303
Pulling force
On-line force monitoring of platform ascending rapid prototyping system, 257
Pulsed laser deposition
Neural network based modeling of PL intensity in PLD-grown ZnO thin films, 159
Punch stretching
A review of the application of acoustic emission techniques for monitoring forming and grinding processes, 48

Rapid prototyping
On-line force monitoring of platform ascending rapid prototyping system, 257
Producing molten metal droplets with a pneumatic droplet-on-demand generator, 295
Rapid tooling
Dimensional accuracy studies of copper shells used for electro-discharge machining electrodes made with rapid prototyping and the electroforming process, 33
Reclamation and foundry sand
Foundry sand recycling in the troughs of blast furnaces: a technical note, 125
Recycling
Foundry sand recycling in the troughs of blast furnaces: a technical note, 125
Regression analysis
Effects of over-roll thickness on cone surface roughness in shear spinning, 1
Remeshing
Finite element analysis of thixoforming process with arbitrary shape die, 321
Residual copper
Surface hot-shortness of 1045 forging steel with residual copper, 169
Resin bond
Loose abrasive truing and dressing of resin bond diamond cup wheels for grinding fibre optic connectors, 229
Response surface method
Effects of over-roll thickness on cone surface roughness in shear spinning, 1
Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, 426
Ring heat flux
Numerical solutions of transient temperature and thermally induced stress distributions in a solid disk heated with radially periodic expanding and contracting ring heat flux, 99
Robot
Process modeling for robotic polishing, 69

Rock cutting
Experimental study of rock cutting under external hydrostatic pressure, 206
Roll forming
Spline finite strip analysis of forming parameters in roll forming a channel section, 383

Scandium
Effect of Zr content and mechanical working on the structure and tensile properties of AA8090 alloy plates, 369
Severe plastic deformation
Grain refinement, thermal stability and tensile properties of 2024 aluminum alloy after equal-channel angular pressing, 314
Shear force
Effects of over-roll thickness on cone surface roughness in shear spinning, 1
Shear spinning
Effects of over-roll thickness on cone surface roughness in shear spinning, 1
Shearing
Orthotropic effect and strain dependency of paperboard on load characteristic of center bevel cutter indented on paperboard, 199
Sheet metal forming
A novel process on friction aided deep drawing using tapered blank holder divided into four segments, 418
Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, 426
Silicon carbide
On the possibility of obtaining silicon carbide using the glow-discharge electron gun, 311
Simulation
Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, 426
Slate tiles
Drilling of slate tiles by CO_2 laser, 83
Space mapping
Optimization of draw-in for an automotive sheet metal part. An evaluation using surrogate models and response surfaces, 426
Spinning
A study of the one-path deep drawing spinning of cups, 397
Splitting
Work of fracture and of chips formation during linear cutting of particle-board, 224
Springback
Investigation of springback in high strength anisotropic steels, 91
Squeeze casting
Influence of initial stresses on the cast behaviour during squeeze forming processes, 338
Steel
Surface hot-shortness of 1045 forging steel with residual copper, 169
Stellite-6
Mechanical and metallurgical properties of plasma sprayed and laser remelted Ni–20Cr and Stellite-6 coatings, 347
Stereolithography
On-line force monitoring of platform ascending rapid prototyping system, 257
Strain dependency
Orthotropic effect and strain dependency of paperboard on load characteristic of center bevel cutter indented on paperboard, 199
Strain path
Reversed straining in axisymmetric compression test, 62
STS304
Investigation on the variation of deep drawability of STS304 using FEM simulations, 389
Surface integrity
Synergistic effects of thermo-chemical treatment and super abrasive grinding in gears' manufacturing, 249
Surface morphology
A technical note on grit embedment following abrasive water-jet milling of a titanium alloy, 356
Surface roughness
Effects of over-roll thickness on cone surface roughness in shear spinning, 1
Influence of surface roughness on friction during metal forming processes, 9
Surfaces and interfaces
Process parameters selection for friction surfacing applications using intelligent decision support, 27
Synergy
Synergistic effects of thermo-chemical treatment and super abrasive grinding in gears' manufacturing, 249

T6 heat treatment
Data base construction on mechanical properties of thixoforged aluminum parts and their microstructure evaluation, 330
Tapered-divided blank holder
A novel process on friction aided deep drawing using tapered blank holder divided into four segments, 418
Temperature distribution
Numerical solutions of transient temperature and thermally induced stress distributions in a solid disk heated with radially periodic expanding and contracting ring heat flux, 99
Tensile properties
Microstructure and tensile properties of a continuous-cast Al–Li–Hf alloy, 164
Grain refinement, thermal stability and tensile properties of 2024 aluminum alloy after equal-channel angular pressing, 314
Effect of Zr content and mechanical working on the structure and tensile properties of AA8090 alloy plates, 369
Texturing
New EDM polishing and texturing process with conductive polymer electrodes, 17
Thermal modelling
Thermal influence of cutting tool coatings, 119
Thermal stability
Grain refinement, thermal stability and tensile properties of 2024 aluminum alloy after equal-channel angular pressing, 314
Thermal stress
Numerical solutions of transient temperature and thermally induced stress distributions in a solid disk heated with radially periodic expanding and contracting ring heat flux, 99
Thermoplastic polymers
Laser cutting of different polymeric plastics (PE, PP and PC) by a CO_2 laser beam, 279
Thixoforging process
Data base construction on mechanical properties of thixoforged aluminum parts and their microstructure evaluation, 330
γ-Titanium aluminide
Parametric analysis and optimization of wire electrical discharge machining of γ-titanium aluminide alloy, 286
Titanium dioxide
A study on usability of magnesium oxide with titanium dioxide in PVC door and window profiles, 40
Tool breakage
Detecting tool breakage in turning aisi 1050 steel using coated and uncoated cutting tools, 191
Tool condition monitoring
Detecting tool breakage in turning aisi 1050 steel using coated and uncoated cutting tools, 191
Tool life
Detecting tool breakage in turning aisi 1050 steel using coated and uncoated cutting tools, 191
Machinability of bimetallic bearings using cemented carbide tools: evaluation of the wear mechanisms, 435

Tool steel molds
New EDM polishing and texturing process with conductive polymer electrodes, 17
Torsion test
Deformation processing map for control of CuSi3.9 silicon bronze microstructure, 377
TRIP
Investigation on the variation of deep drawability of STS304 using FEM simulations, 389
Truing and dressing
Loose abrasive truing and dressing of resin bond diamond cup wheels for grinding fibre optic connectors, 229
Tube hydroforming
An adaptive simulation approach designed for tube hydroforming processes, 303

Ultrafine grit
Loose abrasive truing and dressing of resin bond diamond cup wheels for grinding fibre optic connectors, 229

UV radiation
A study on usability of magnesium oxide with titanium dioxide in PVC door and window profiles, 40

Variable vertical section
A technical note on the development of prototype CNC variable vertical section extrusion machine, 139

Wedge indentation
Orthotropic effect and strain dependency of paperboard on load characteristic of center bevel cutter indented on paperboard, 199
WEDM
Parametric analysis and optimization of wire electrical discharge machining of γ-titanium aluminide alloy, 286
Welding parameters
An investigation into an intelligent system for predicting bead geometry in GMA welding process, 113
Wire offset
Parametric analysis and optimization of wire electrical discharge machining of γ-titanium aluminide alloy, 286